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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,028	08/30/2001	Mitsuo Yasunobu	43890-537	7271

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EXAMINER

VUONG, JASON DUY ANH

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,028

Applicant(s)

YASUNOBU, MITSUO

Examiner

Jason D. A. Vuong

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-14 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 15 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08/30/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. **Claims 3, 4, and 6** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding **Claim 3**, the phrase "and then converting into the data" (**Claim 3** Line 16) is considered as being indefinite because it is unclear what the data format converter is trying to convert.

Regarding **Claims 4 and 6**, these claims are rejected because they depend on the rejected **Claim 3**.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,900,902 to Sakakibara in view of U.S. Patent No. 6,204,934 B1 to Minamino, and in further view of U.S. Patent No. 6,621,526 B1 to Yamagishi.

Regarding **Claim 1**, Sakakibara discloses a modem (see Figure 1 Element 90 and also refer to Column 2 Line 42) for modulating the data to be transmitted through a communication line (see Figure 1 Element 150) and demodulating the received data. A memory card input and output unit is also disclosed (see Figure 1 Element 140) for reading or writing data to a memory card (refer to Column 2 Lines 53-55). Sakakibara does not disclose a “scanner”, a YCbCr-to-RGB converter, and an RGB-to-L*a*b* converter. Though it does disclose a “reading portion” that appears to basically function as a scanner.

Minamino discloses a scanner that scans an original image (see Figure 1 Element Sc, and also refer to Column 3 Lines 12-14), and an RGB-to-L*a*b* converter which converts the RGB data to L*a*b* data (see Figure 1 Element 1, and also refer to Column 3 Lines 12-14).

Yamagishi discloses a YCbCr-to-RGB (see Figure 1 Elements 51 and 52) converter that converts YCbCr data to RGB data (refer to Column 5 Lines 38-41).

Therefore it would have been obvious to one skilled in the art to combine Sakakibara's data communication system with Minamino's features (scanner and RGB-to-L*a*b* converter) and Yamagishi's YCbCr-to-RGB converter. The motivation to do

so is to integrate the memory card reader and writer, and a scanner into a communication system to form an all-in-one device that is capable of transmitting and receiving black-and-white and color image data, and digital images can also be transmitted directly from the memory card. The received image data can also be saved to the memory card; so the end-user can save a lot of papers by not having to print the received image data. Further, the scanner of Minamino can replace the reader of Sakakibara and the respective color conversions are standard operations to transform image data into the conventional color space for the respective device.

3. **Claims 2 and 3** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,900,902 to Sakakibara in view of U.S. Patent No. 6,204,934 B1 to Minamino, and in view of U.S. Patent No. 6,621,526 B1 to Yamagishi as applied to **Claim 1** above, and further in view of U.S. Patent No. 6,809,836 B1 to Nobuta et al.

Regarding **Claims 2 and 3**, Sakakibara discloses a modem (see Figure 1 Element 90 and also refer to Column 2 Line 42) for modulating the data to be transmitted through a communication line (see Figure 1 Element 150) and demodulating the received data. A memory card input and output unit is also disclosed (see Figure 1 Element 140) for reading or writing data to a memory card (refer to Column 2 Lines 53-55). Sakakibara does not disclose a "scanner", a YCbCr-to-RGB converter, an RGB-to-L*a*b* converter, an L*a*b*-to-monochrome converter, and a means for judging the type of image data (color or monochrome) receivable in a destination side facsimile

apparatus. Though it does disclose a "reading portion" that appears to basically function as a scanner.

Minamino discloses a scanner that scans an original image (see Figure 1 Element Sc, and also refer to Column 3 Lines 12-14), and an RGB-to-L*a*b* converter which converts the RGB data to L*a*b* data (see Figure 1 Element 1, and also refer to Column 3 Lines 12-14). A means to convert L*a*b* to monochromatic format is also disclosed (see Figure 1 Element 1).

Yamagishi discloses a YCbCr-to-RGB (see Figure 1 Elements 51 and 52) converter that converts YCbCr data to RGB data (refer to Column 5 Lines 38-41).

Nobuta et al. disclose a means for judging the type of image data (color or monochrome) the receiver-side facsimile apparatus can receive; the receiver-side facsimile apparatus tells the sender-side facsimile apparatus of the receivable data type by sending a BFT bit indication embedded within the DIS (Digital Identification Signal). The receiver facsimile apparatus must send this DIS packet telling the sender facsimile apparatus of its receiving capabilities; so the sender facsimile apparatus is able to determine whether the receiver facsimile apparatus can receive color or monochrome image data (refer to Column 30 Lines 33-59).

Therefore it would have been obvious to one skilled in the art to combine Sakakibara's data communication system with Minamino's features (scanner, RGB-to-L*a*b* converter, and L*a*b*-to-monochrome converter), Yamagishi's YCbCr-to-RGB converter, and Nobuta et al.'s teaching of the data type judging means. The motivation to do so is to integrate the memory card reader and writer, and a scanner into a

communication system to form an all-in-one device that is capable of transmitting and receiving black-and-white and color image data, and digital images can also be transmitted directly from the memory card. The received image data can also be saved to the memory card; so the end-user can save a lot of papers by not having to print the received image data. Further, the scanner of Minamino can replace the reader of Sakakibara and the respective color conversions are standard operations to transform image data into the conventional color space for the respective device.

4. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,900,902 to Sakakibara in view of U.S. Patent No. 6,204,934 B1 to Minamino, in view of U.S. Patent No. 6,621,526 B1 to Yamagishi, and in view of U.S. Patent No. 6,809,836 B1 to Nobuta et al. as applied to **Claims 2 and 3** above, and further in view of U.S. Patent No. 4,636,848 to Yamamoto.

Regarding Claim 4, Yamagishi discloses a converter that converts YCbCr data into RGB data (see Figure 1 Elements 51 and 52). Yamagishi does not disclose an RGB-to-L*a*b* converter and an L*a*b*-to-MH converter.

Minamino discloses an RGB-to-L*a*b* converter which converts the RGB data to L*a*b* data (see Figure 1 Element 1, and also refer to Column 3 Lines 12-14).

Yamamoto discloses a Compression & Extension Circuit that converts picture information to MH format (see Figure 2 Element 52, and also refer to Column 4 Lines 10-15).

Therefore it would have been obvious to one skilled in the art to combine the YCbCr-to-RGB converter (disclosed by Yamagishi) with the RGB-to-L*a*b* converter (disclosed by Minamino) and the MH converter (disclosed by Yamamoto). The motivation to do so is to provide a flexible facsimile system that is capable of efficiently transmitting and received color or monochromatic image data. The YCbCr-to-RGB converter is needed to converter images saved in a memory card (in YCbCr format) into RGB; the YCbCr format is widely used because of its efficiency (an uncompressed YCbCr-TIFF file has the same picture quality as RGB format but it occupies less space, roughly two thirds the size of an RGB-TIFF file). The MH converter is used to compress image data before sending it to the receiver (MR, MMR, and other compression methods can be used). So the combined motivation is to provide an efficient facsimile system that is capable of transmitting and receiving color or monochromatic image data.

5. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,900,902 to Sakakibara in view of U.S. Patent No. 6,204,934 B1 to Minamino, and in view of U.S. Patent No. 6,621,526 B1 to Yamagishi as applied to **Claim 1** above, and further in view of U.S. Patent No. 6,446,177 B1 to Tanaka et al.

Regarding Claim 15, Tanaka et al. disclose a memory card with copyright protection function (see Figures 1 and 7, and also refer to Column 8 Lines 1-8).

Therefore it would have been obvious to one skilled in the art to combine the features of **Claim 1** with the copyright protection feature (disclosed by Tanaka et al.).

The motivation to do so is to provide protection of copyrighted data when a memory card is used.

Allowable Subject Matter

6. **Claims 7, 8, 9, 10, 11, 12, 13, and 14** are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the current invention discloses a facsimile apparatus with an integrated memory card input and output unit.

Claim 7 cites a facsimile apparatus with an integrated memory card unit. The facsimile apparatus is capable of transmitting and receiving color or monochromatic image data. The YCbCr-to-RGB converter is used to convert YCbCr image data (save in the memory card) to RGB data. The RGB-to-L*a*b* converter is used to convert RGB data to L*a*b*. The L*a*b* is then sent to the receiver that is capable of receiving color image data. If the receiver can only receive monochromatic image data, the L*a*b*-to-MH converter is used to convert L*a*b* to MH data. The MH data is then sent to the receiver.

Such features in combination with other elements of the claims are not disclosed or suggested by the prior art of record.

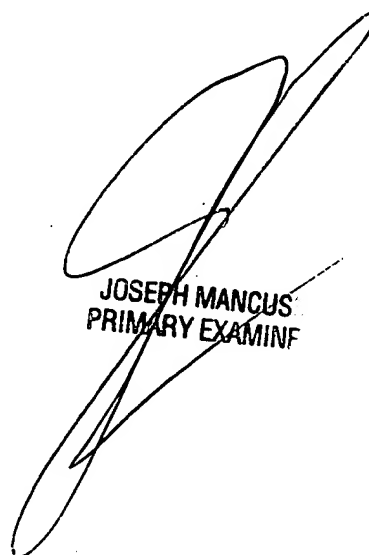
7. **Claims 5, and 6** are allowable.

Claims 5, and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications should be directed to Jason Vuong at 703-306-4157. The examiner can normally be reached on Monday-Friday from 8:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's trainer, Joseph Mancuso can be reached at 703-305-3885.



JOSEPH MANCUSO
PRIMARY EXAMINER